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Mensch beschaffen sin, der Gott scheuen will? and resolved in the sonorous and meaning-laden answer: Der muss tot sin. μκρκ.

LE POUVOIR ET LE DROIT PHILOSOPHIE DU DROIT OBJECTIF. By Ladislas Zaleski.

Professor in the University of Kazan. Translation by Mlle. A. Balabanoff.

Paris: Schleicher Frères. 1899. Pages, 94. Price, 3 francs.

Recent years have witnessed a renaissance of juridical studies, particularly in their general relationship to ethics, sociology, and political economy, and it is not too much to say that the time is not far distant when even in our country the exposition of the principles of jurisprudence will be taken entirely from the hands of narrow-sighted practitioners and dogmatic theorists, and entrusted to the care of jurisconsults of genuine scientific culture. Professor Zaleski's little work is an indication of the direction in which events in this department are moving, and it is therefore not without importance to students of jurisprudence and sociology. It is in the nature of a supplement to the theories of Aguilera and Fouillét, and contains clear résumés of certain important German doctrines which are little known to the general body of students. M. Zaleski is a professor in the University of Kazan, Russia, and the simple and precise translation of Mile. Balabanoff has placed the results of his reflexions, whatever they may be worth, within the reach of European and American readers.

Some Problems of Lotze's Theory of Knowledge. By Edwin Proctor Robins, M. A., Late Scholar and Fellow of Cornell University. Edited with a Biographical Introduction by J. E. Creighton. New York: The Macmillan Company. 1900. Pages, 108.

We learn from the introduction to the present monograph, written by Professor Creighton, that it was intended as a dissertation for the degree of Doctor of Philosophy from Cornell University, and that its author, Mr. Edwin Proctor Robins, who held a fellowship in the Sage School of Philosophy, died after an illness of three days, having nearly completed his twenty-seventh year. We are also informed that its aim is "sympathetically to interpret the spirit of Lotze's system as a whole—to do justice to the philosopher by taking him at his best rather than to exhibit the literal inconsistencies of his system." The book will unquestionably be of value to those who are desirous of studying Lotze's system, which is discussed here in three chapters bearing the following titles: I. Problem and Method; II. The Appearance of Reality; and III. Reality and Knowledge.

Essais sur la philosophie des sciences. Analyse—mécanique. By C. de Freycinet, de l'Institut. Deuxième édition. Paris: Gauthier-Villars, Imprimeur-Libraire. 1900. Pages, 336. Price, 6 francs.

It is clearly indicative of the growing interest taken in the philosophy of science that the present second edition of M. Freycinet's work should have appeared four years after the original publication. The book contains changes of some importance, the chief of which is the greater emphasis the author has laid upon his presentation of the notions of "work" and "living force." He asserts furthermore that after a careful revision of the facts of the case he still remains convinced that it was Kepler who first discovered the law of inertia, and that Galileo, whose glory is in no wise diminished by the fact, did nothing more than to render it precise and to develop its consequences. Although M. Freycinet's work was reviewed at some length in Vol. III. of *The Monist*, it may not be out of place to epitomise again a specimen of his discussions, and we shall select for this purpose two passages relating to the concepts "quantity of matter" and "mass" often identified in physical text-books, and to M. Freycinet's novel notion of "dynamic capacity."

The concept of "mass" describes certain facts; "quantity of matter" by its long historic and broad metaphysical content, stands for many things. It either must be identified with mass or it must be re-defined. That this is necessary, may be shown by the following extract from M. Freycinet, who, after speaking of the different forces requisite to induce the conventional velocity of ten metres a second in a cubic decimetre of water and in a cubic decimetre of lead, says:

"It would be hazardous to conclude that the cubic decimetres in question contain more or less matter. It may be that the number of indivisible elements of the water is the same as the number of indivisible elements of the lead, or of mercury, or of platinum, and that each of these elements has an equal volume. It is also possible that the number of the elements is different, but as to volume, inversely different, so that the absolute volume of the matter water contained in a cubic decimetre is equal to the absolute volume of the matter lead, mercury, or platinum. Under such conditions, how can we assert that the quantity of matter of the one is greater than the quantity of matter of the other? The sole justifiable affirmation is that the matter water does not comport itself with regard to forces in the same way that the matter lead, mercury, or platinum does. In other words, water, lead, mercury, etc., absorb at the same volume different quantities of force or impulses in order to take on the same movement."

The elastic, indefinite character of the notion "quantity of matter" is obvious from this quotation, and it admits of even other conceptions, which vitiates utterly its supposed aid in elucidating the concept of mass.

The concluding part of the statement of M. Freycinet, which involves a comparison of the dynamical with the thermal relations of bodies, is important. M. Freycinet speaks of bodies absorbing force as bodies absorb heat. Different bodies absorb different quantities of heat in being raised one degree of temperature and so different bodies absorb different quantities of force in taking on the same unit of velocity. If the first is called the thermal capacity of a body, the second may be called its dynamic capacity. The difference is that the thermal capacities vary with the temperature, while the dynamic capacities do not vary with the velocities. Analogously to the old conception of heat, force may be here conceived as a

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substance which passes from one body to another just as heat was formerly supposed to pass and as energy is now supposed to pass.

The idea of M. Freycinet belongs to a domain of criticism which Professor Mach has called "comparative physics" and which, by showing what form our knowledge might have taken had we begun at different starting-points, is destined to throw much light upon the fundamental nature of physical notions. μ .

Scientia. Exposé et développement des questions scientifiques à l'ordre du jour. Recueil publié sous la direction de MM. Appell, Cornu, d'Arsonval, Friedel, Lippmann, Moissan, Poincaré, Potier, et MM. Balbiani, d'Arsonval, Filhol, Fouqué, Gaudry, Guignard, Marey, Milne-Edwards. Chaque fascicule comprend de 80 à 100 pages in-8° écu, avec cartonnage spécial. Prix du fascicule: 2 francs. Paris: Georges Carré & C. Naud.

The attractive series of scientific monographs now published periodically under the title of Scientia by Georges Carré and C. Naud, of Paris, with the editorial assistance of the most prominent scientists of France, supplies a genuine want in serious literature. The results of current research, as recorded in the technical periodicals, are for the most part disconnected and fragmentary, and thus difficult to reach as a totality. The idea of a series of publications, therefore, which shall put these results into compact and systematic form, accompanied by critical comments, is a commendable one. But not only are the numbers of this series brief and logical résumés of the most important of recent discoveries in physics, chemistry, mathematics, and biology; they are also expositions of the philosophical ideas controlling research in these different fields, and of the variations of scientific evolution generally. To students who are not determined to specialise absolutely, they, or something equivalent to them, are indispensable. They are also of the nature of a retrospect and horoscope of science combined, showing the past, the present, and as nearly as possible the future, of each new acquisition, the equilibrium of thought which it has destroyed or established, the deviation of effort which it has induced, the new horizons which it has opened, the sum total of intellectual progress which it represents. Of such a character, for instance, is the memoir on Maxwell's Theory and Hertz's Oscillations, by Poincaré, which summarises from the physical point of view researches which now occupy a large place in the public attention. Such also is the memoir upon Stereo-chemistry by P. Freundler, which gives a critical epitome of a very prolific and important department of thought, in which much confusion has latterly reigned. Similar in the department of mathematics is the essay on Elimination by H. Laurent, which is the first complete treatment of the subject since 1859, and which offers a digest of all the methods now known, in addition to giving some new discoveries of the author.

Scientia is divided into two sections: (1) a physical-mathematical section, and (2) a biological section. The following, in addition to those mentioned above, are the memoirs which have already appeared in the first section: Les mouvements de